

Solar and UPS Battery

Solar and UPS Battery is manufactured with special separators and silica gel immobilizing the electrolyte inside the battery. The proven silica gel technology can improve battery cycle life and performance at wider temperature range. The deep discharge cycle life is increased 50% compared with the GP series battery.

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Alarm system
- * Marine equipment
- * Medical equipment
- * Fire and Security System



General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

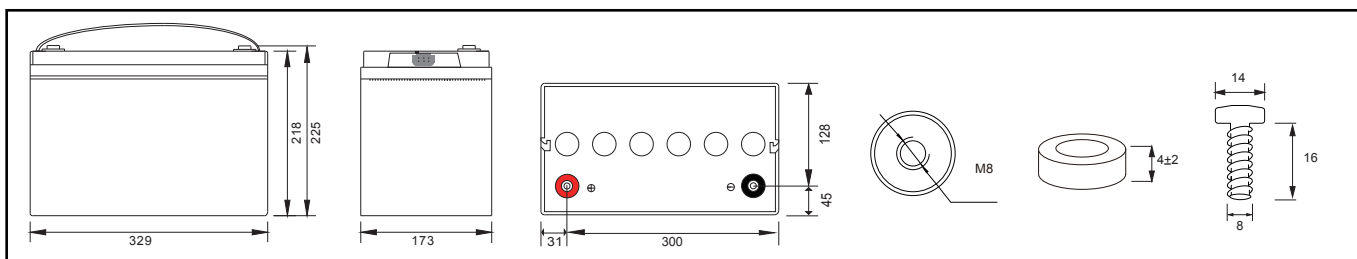
Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage			12V
	Rated capacity (10 Hour rate)			100Ah
	Cells Per battery			6
Dimension	Length	Width	Height	Total Height
	329mm (12.95 inches)	172mm (6.77 inches)	218mm (8.58 inches)	225mm (8.85 inches)
Approx Weight	28.0kg(61.72lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(10A,10.8V)	5 hour rate(16A,10.5V)	3 hour rate(23.8A,10.8V)	1 hour rate(60A,9.6V)
	100Ah	80Ah	71.4Ah	60Ah
Max.discharge current	800A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 4.3mΩ			
Capacity affected by Temp.(10 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use			Float Use
	14.40-14.70V (Initial charging current less than 30A)			13.50-13.80V

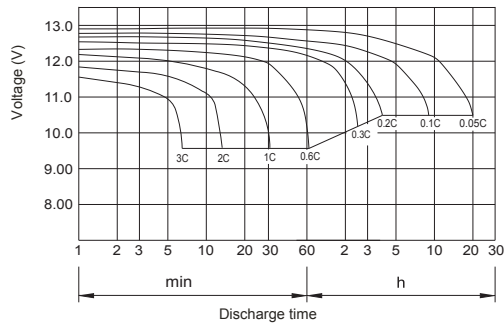
Outer dimension (mm)



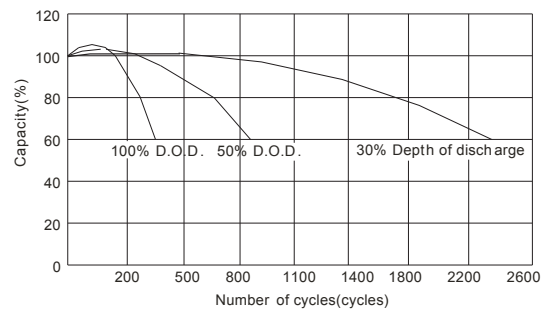
Terminal Type (mm)

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)													
F.V.TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	320.3	211.0	170.1	114.0	60.0	35.0	25.7	20.0	16.5	11.7	10.5	5.7
	W	3305.5	2253.5	1823.8	1225.7	648.0	384.3	286.0	225.0	187.6	134.1	121.3	65.9
10.20V	A	310.2	190.4	160.2	109.0	56.4	33.4	25.0	19.5	16.2	11.4	10.3	5.5
	W	3312.9	2126.0	1792.6	1223.6	637.9	385.0	289.5	226.7	188.9	133.4	121.0	64.5
10.50V	A	300.1	170.3	140.1	102.0	54.6	32.6	24.4	19.2	16.0	11.3	10.1	5.5
	W	3277.1	1937.3	1598.8	1173.8	632.3	378.1	284.3	224.6	187.6	132.9	119.5	65.0
10.80V	A	289.2	160.5	130.2	94.0	52.8	31.8	23.8	18.9	15.6	11.0	10.0	5.4
	W	3244.8	1850.9	1499.9	1089.1	614.6	372.4	280.6	223.2	184.4	130.4	118.9	64.3
11.10V	A	279.5	150.4	120.2	84.0	51.0	31.0	23.0	18.4	15.2	10.7	9.5	5.1
	W	3169.5	1741.6	1399.1	982.8	599.8	366.4	273.2	219.1	181.4	128.1	114.7	61.8

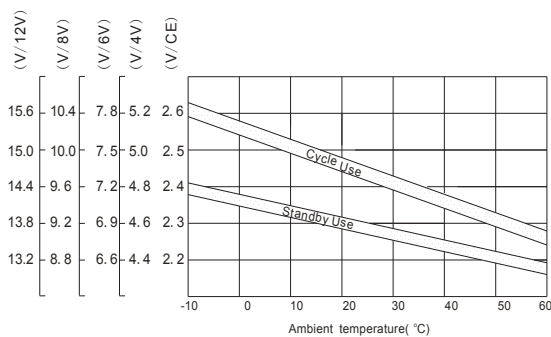
Discharge characteristic Curve



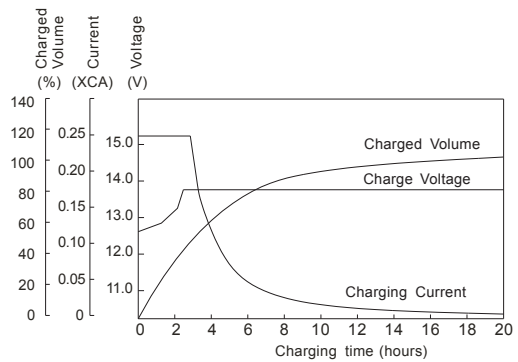
Cycle service life in relation to depth of discharge



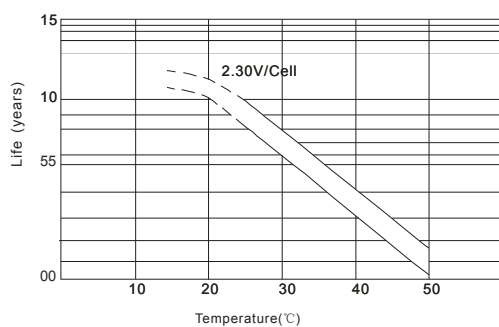
Relationship between charging voltage and temperature



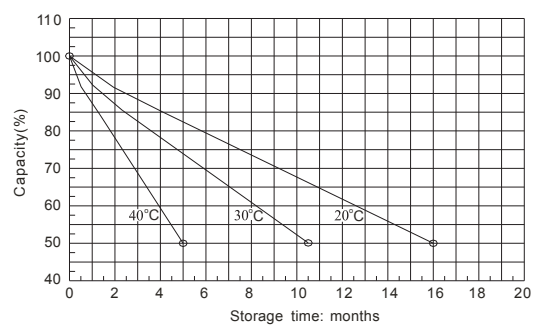
Constant voltage charging characteristic (0.25CA, at 25°C)



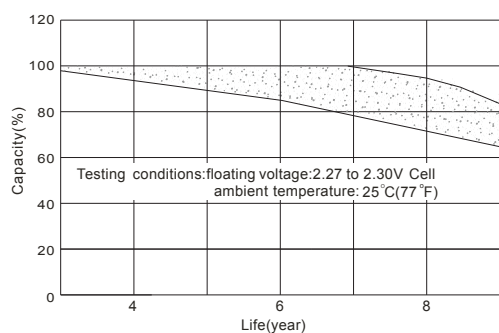
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

